



Intercultural  
Development  
Inventory®

# Intercultural Learning in Business and Management Studies

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A WHITE PAPER SYNTHESIZING RESEARCH WITH THE  
INTERCULTURAL DEVELOPMENT INVENTORY®

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## Executive Summary

This white paper provides a snapshot of the strategies used by Higher Education Institutions (HEIs) to impart intercultural competence to business and management-related disciplines. Some important points to note here are:

- The studies discussed in this paper used the Intercultural Development Inventory (IDI) assessment to evaluate students' intercultural learning gains.
- The paper is organized under the following three themes: 1) study abroad and intercultural learning, 2) curriculum infusion (no study abroad) and intercultural learning, and 3) role of training the trainer in developing a global workforce.
- This analysis highlights the importance of creating a global workforce by engaging management students in structured interventions and study abroad programs and discusses the role of faculty in imparting intercultural competence.

## Background

With advances in technology and increased mobility, it has become easier for businesses to hire a talented workforce across the globe [1]. After the COVID-19 pandemic, working in virtual teams has become the norm [1], [2]. It is also important to note that working with people from diverse backgrounds is not easy and requires a good understanding of other cultures, traditions, and workplace ethics [3]. Today, business schools and international studies programs are trying their best to nurture globally-competent graduates and impart an education that helps budding managers

to develop interculturally competent leadership skills [4]. Students enrolled in business management, global leadership, and international studies programs are likely to become future managers and manage diverse teams; therefore, they must develop self-awareness and awareness of other cultures to bridge and appreciate differences [5]. Intercultural competence is crucial for these students as being interculturally skilled helps them deal with ambiguity and stressful situations and develop problem-solving skills while working in a complex business environment [6]. To become influential leaders in the future, students must know how to handle emotional and ambiguous situations and be able to shift cognitive frames. According to *LaFromboise and colleagues [7] to become interculturally competent, it is essential for the individual to “(a) possess a strong personal identity, (b) have knowledge of, and facility with the beliefs and values of the culture, (c) display sensitivity to the affective processes of the culture, (d) communicate clearly in the language of the given cultural group, (e) perform socially sanctioned behavior, (f) maintain active social relations within the cultural group, and (g) negotiate the institutional structures of that culture”.*

It has also been observed that studies have used the Intercultural Development Inventory (IDI) as one of the essential tools to assess the impact of studying abroad or curriculum infusion on students' intercultural learning gains. The IDI is one of the most popular instruments used to assess the intercultural learning gains of students, as it is theoretically grounded in the Developmental Model of Intercultural Sensitivity. The IDI uses 50 multiple-choice questions to assess participants' intercultural competence and place them along the Intercultural Development Continuum (IDC) in one of five orientations: Denial, Polarization, Minimization, Acceptance, and Adaptation. The Denial orientation indicates that the participant ignores cultural differences. Polarization signifies that the participant

tends to compare their culture with other cultures with an attitude of 'us versus them.' Minimization is the third stage, indicating that the participant focuses on commonalities and ignores the differences. The next stage is Acceptance, meaning participants can recognize and appreciate cultural differences. The last stage is Adaptation, meaning the participant recognizes differences and tries to adapt and bridge difference. IDI results also consist of other essential scores they are Developmental Orientation (DO), Perceived Orientation (PO), and Orientation Gap (OG). DO scores reflect the intercultural competence level of the participant as measured by the IDI. The PO score is the score that reflects the perception of the participant about their own intercultural competence. OG refers to the difference between DO and PO scores. Suppose the OG is greater than 7 points. In that case, it means the participant has shown a meaningful gain in the DO scores.

Based on these prior studies conducted in the context of higher education and at the intersection of intercultural competence and management [4], [8]–[10], intentional initiatives to offer students opportunities for intercultural learning are commonly practiced. On the basis of our literature synthesis, we identified three primary methods used by higher education institutions to impart intercultural competence to management students: i) studying abroad, ii) embedding the concepts of intercultural competence in the curriculum, and iii) training the trainer model. We will discuss the three methods in the subsequent section of the paper.

## **Study abroad and intercultural learning**

In management, leadership, and global studies, studying abroad is an effective mechanism to help students develop intercultural competence. But, studies have demonstrated that only studying abroad is not enough to motivate students to

develop intercultural competence intrinsically. Designing a structured immersive experience is crucial for the students to understand the implicit factors of culture, such as values and beliefs, and develop competence to recognize and appreciate differences. For example, the study conducted by Anderson and colleagues [4] assessed the impact of a study abroad on senior-level undergraduate students from the United States enrolled in a management program. The study investigated the impact of 1 week of on-campus classes and four week-long study abroad programs on students. Students were in London, England, for two weeks and another two weeks in Cork, Ireland. The program allowed the students to learn about the culture by interacting with speakers during the guest lecture; students also traveled and interacted with locals while studying abroad. The students also attended a talk series by "British Life and Culture" and learned about health services, tax policies, etc. Students in London lived with British Families in a homestay arrangement, where they had the opportunity to share and learn about British culture.

During their visit to Cork, Ireland, students stayed in a house next to campus. Still, they did not have much opportunity to interact with university students as they were away from the campus because of summer vacations. But, students visited local pubs in both London and Cork and had the opportunity to interact with students from another nearby university. The interaction with other students helped them to form acquaintances. Pre- and post-IDI assessments were conducted to assess the students' intercultural learning gains. The pre-IDI assessment was conducted at the beginning of the classes, and the post-IDI assessment was conducted on the last day. The results of the t-test demonstrated an increase of 4.22 points in the overall DO scores from pre to post-test at a 90% confidence level. There was also a statistically significant increase in Polarization (reversal) and Acceptance/ Adaptation constructs

at the 95% confidence interval from their pre to post test. The study concluded that structured study abroad could lead to intercultural gains.

Integrating curricular initiatives with study abroad programs is on the rise in Higher Education Institutions. The combination of curriculum integration with study abroad has been found effective as it allows the students to develop holistically by engaging students in active learning intercultural activities during the class, followed by a study abroad trip. For example, Rust and colleagues [10] conducted a study demonstrating the impact of curriculum integration and study abroad programs for management students. The study intended to compare the impact of two student groups 1) study abroad and enrolled in intercultural studies and 2) only participated in the study abroad program. Twenty students participated in the study. Five of 20 students participated only in study abroad, while 15 students participated in study abroad and were enrolled in a major or minor in intercultural studies. The study abroad program was ten days long. Students enrolled in intercultural studies completed 38 semester hours of course work, and students pursuing a minor in intercultural studies completed 20 semester hours of course work. The IDI assessment was used to assess the intercultural learning gains of the students. The study's results demonstrated that all 20 students gained 15.80 points from their pre- to post-IDI assessment scores. Five students who just did study abroad also demonstrated a gain of 4.81 points in their DO scores. 13 students who completed a minor in intercultural studies demonstrated a gain of 23.23 points in the DO; they moved from Minimization to Acceptance as a group. The two students who completed a major in intercultural studies demonstrated a decrease in DO from pre to post by 5 points. But it is important to note that these students were in Acceptance

before going to study abroad, and they remained in Acceptance after the study abroad. Overall, the study demonstrated the impact of a structured curriculum and study abroad on students' intercultural competence.

Similarly, the study by Sample [9] demonstrated the impact of curriculum infusion and study abroad on the intercultural learning of the students enrolled in the School of International Studies (SIS) program in California, United States. The students enrolled in the SIS program were required to take a pre-IDI assessment in their first year. As a part of the SIS curriculum, students learn about various topics and engage in an international curriculum designed to help students develop intercultural skills. Most students in the SIS program also participated in study abroad and completed the post-IDI assessment upon their return from study abroad. Moreover, students were required to write reflections based on their experiences. The results demonstrated that the DO scores of the students increased by 19.78 points from pre-to-post-IDI assessment. Also, when comparing the SIS with non-SIS students, students in the SIS program demonstrated a significant gain in DO scores by 15.71 points. The reflection paper analysis also revealed that students understood other cultures and values. The study also compared the DO score of SIS students with study abroad experience university students who have neither studied abroad nor was part of the interdisciplinary, international curriculum. The study's results demonstrated that SIS students significantly increased DO scores over non-SIS students. The study concluded that engaging students in planned intercultural curriculum help students develop intercultural competence.

The structured study abroad initiatives allow learners to become culturally aware of their own and other cultures. Prior studies have also emphasized that

conducting an unstructured study abroad trip is more like a site-seeing visit for the students [6]. To make study abroad effective, higher education institutions must develop strategies and curricula and mentor students to help them become interculturally competent. For example, a study by Jones and colleagues [11] has demonstrated the impact of a structured curriculum and constant mentoring on the students' intercultural competence. The study allowed the students to participate in a semester-long initiative followed by 14 days of study abroad trip, and students were constantly mentored and completed reflections, activities, and discussions related to intercultural competence. The study used the IDI to measure the intercultural level of the students. The results of the study demonstrated that students had a significant gain in their DO scores and moved up on the Intercultural Development Continuum.

Similarly, a study by Bittinger and Jin [8] focused on the role of a structured study abroad initiative and a planned re-entry initiative in helping students develop intercultural competence. The participants of this study were pre-freshman students who studied abroad and later joined Purdue as first-year students on campus. All the students participated in various activities, readings, and exercises that helped the students to develop an understanding of culture before the study abroad program. During the study abroad program, students went to Peru and were exposed to Peruvian culture, stayed with host families, and participated in various cross-cultural activities and reflections. After coming back, students participated in an eight-week program. The data was collected from 2017 to 2019. All the students took a pre-, mid, and post-IDI. The DO scores for all three cohorts demonstrated an increase in the scores. There was a statistically significant increase from i) pre to mid-test, ii) mid to post-test, and iii) pre to post-tests for all three cohorts the DO scores in Table 1.



Shifting the students meaningfully on the intercultural development continuum can be achieved by immersing students in experiential learning experiences, and structured study abroad followed by mentoring and guided reflection can serve as an effective method.

Table 1: DO score for the three consecutive year and three time points

<b>Year</b>	<b>Pre</b>	<b>Mid</b>	<b>Post</b>
2017	88.79	100.35	110.46
2018	84.95	100.15	105.34
2019	87.56	103.00	109.73

## Curriculum infusion (no study abroad) and intercultural learning

Curriculum infusion without study abroad is a common and economic practice to help students develop intercultural competence. Creating a structured curriculum that helps students to grow interculturally requires a conscious effort on the part of instructors. Implementing theoretically grounded pedagogical practices is essential in helping students develop intellectual competence. For example, van Melle and Ferreira [12] used Creative Action Methodology (CAM) pedagogy to help business management students develop intercultural sensitivity. CAM pedagogy is based on two fundamental principles: 1) the current rote educational practices make the learners less motivated to engage in learning practices, and 2) the second principle is specific to the Dutch education system that focusses on the ‘culture of truth, that impedes problem solving’. The CAM pedagogy disagrees with the concept of truth in

Dutch education as it hinders the problem-solving capability of learners. The CAM pedagogy focuses on seven steps to impart learning they are “conceptual thinking, using practical cases or problems, the application of a questioning method in a class, offering advice to learners, using in-class discourse, and giving students the freedom and responsibility to choose.” Therefore, in this study authors propose a theory to integrate CAM and intercultural sensitivity.

According to the theory, implementing CAM pedagogy will help the learners break away from the culture of truth and lean forward to the culture of questioning which will help learners become curious and ask questions related to their and other cultures. This constant attitude to asking questions will help learners to become creative problem solvers. Therefore, CAM pedagogy was used in this study to design the training sessions for the students. Before attending the training session, students took the pre-IDI assessment. Twenty-two students participated in 4 sessions on intercultural training; each session lasted 2.25 hours.

Students were engaged in an active learning environment where they were given case studies and were encouraged to identify solutions to navigate intercultural issues. Upon completion of the intervention, post-IDI assessment was conducted. The results of the IDI assessment were analyzed using paired sample t-test. There was a statistically significant increase in the DO scores of the students. Students moved from Polarization to Minimization after the intervention. Further, a regression analysis was conducted, and the results demonstrated that DO would tend to increase if students participated in more intercultural sessions using CAM.

Curriculum infusion is essential for helping the students gain first-hand knowledge of the culture. A study by Wang [13] described that a structured curriculum intervention can have the same impact on students' intercultural learning

as a study abroad program. Wang's study focused on students enrolled in business and technical communication programs. The study intended to create a curriculum to help students develop intercultural competence. The IDI assessment was used as a tool to assess the intercultural learning gains of the students. The pre-IDI assessment was conducted before designing the curriculum. Forty-four students took the pre-IDI assessment, and scores of the IDI assessment revealed that students were in the Minimization with a score of 87.65. Based on scores, the instructor created a two-week course and teaching goals focused on creating cultural self-awareness, appreciating cultural differences, and developing skills to adapt to other cultures. Upon completion of the training, 35 students completed the post-IDI assessment. The result of the post-IDI assessment revealed that DO score increased by 1.03 points, and the post-DO score was 88.68. The study concluded that two weeks of intercultural training helped students to move along the IDC. Therefore, the study results are promising, and the study also emphasized that curriculum integration is much more economical and straightforward to implement than studying abroad.

## **Role of training the trainer in developing a global workforce**

The growing number of international students in management and business education programs requires the faculty and staff to be interculturally competent. Training the faculty on intercultural competence is crucial as it helps to develop and create an inclusive classroom environment. Especially in the case of business management, an interculturally trained faculty can help to create an intercultural, global workforce. A study by Polyák and colleagues [16] discussed the importance of interculturally trained management faculty members. The study also mentioned the strategies they plan to adopt to train management faculty members on intercultural

competence. The study was conducted at the International Business School (IBS) in Hungary, and the study's objective was to assess the intercultural competence of the university faculty. To assess the initial intercultural competence level of the faculties, an IDI assessment was administered.

Further, based on the results, a one-year training program was created to help faculties develop intercultural competence. The results of the IDI assessment demonstrated that the primary orientation based on DO scores for the faculties was Minimization. The PO scores demonstrated that faculties perceived themselves in the Acceptance stage. Further, looking closely at the scores demonstrated that 80% of faculties were within Minimization and just 20% within Acceptance. The study's results helped the institution develop a program to foster intercultural sensitivity among the faculty members at IBS.

Similarly, a recent study by Eigenmann and Bürki [17] emphasized the importance of creating an interculturally trained workforce by systematically training the faculty, staff, and students on intercultural competence. The study was exploratory in nature and intended to conduct a needs analysis for intercultural training programs in business education. The participants for this study were 33 staff/faculty members and 147 students enrolled in a business management program at a Swiss University. The staff/faculties were divided into two groups: FGGM Business School (n=10) and International Officers (n=23). Students were also divided into three groups: BSc International Business administration (n=76), BSc Business Information Technology (n=22), and BSc Business Administration (n=49). All the participants were required to take the IDI assessment; the staff received their results in an in-person Individual Debrief, whereas the students were required to complete an online debrief session. The results of the study revealed the DO score of the two

faculty groups FGGM Business School and International Officers were 100.6 and 98 respectively. Whereas the three student groups demonstrated lower DO scores, BSc International Business administration (DO=89), BSc Business Information Technology (DO= 83.6), and BSc Business Administration (DO=90).

Further, it was also observed that none of the faculty members had DO scores within Denial; in the case of FGGM, 30% were in Polarization, 40% in Minimization, and 30% in Acceptance, whereas in the case of international Officers, 21.7% were in Polarization, 69.6% in Minimization and 8.7% in Acceptance. Similarly, in the student groups, it was observed that most students were in either Minimization or Polarization, while some were in Denial. It was also interesting to note that for the student group BSc International Business administration, 1.3 percent of students were in Adaptation. The result of this study provided a baseline idea of the intercultural competence level of staff/faculties and students enrolled in the business management program. It also demonstrated the need for developing and implementing effective intercultural initiatives to train faculty/staff and students and move forward towards creating a global workforce. The studies discussed above confirm that training the trainer on intercultural competence is the first step in imparting intercultural competence to the students.

## **Learning from related studies in other disciplines**

Most Higher Education Institutions focus on creating a robust curriculum to help students develop intercultural competence. But creating a curriculum to develop intercultural competence requires conscious efforts by the instructors. Prior studies by Jalali [14] in the context of teacher education also confirm the impact of

curriculum infusion on student intercultural development. The study intended to engage students in an ethnographic study and required the students to interact and communicate with an individual from a different culture from theirs. Students were assigned some tasks and also wrote reflections on their interactions. The study's results demonstrated that students' DO scores increased from pre-to-post-IDI assessment. Also, the qualitative analysis of the reflections confirmed that students developed cultural self-awareness and intercultural sensitivity by interacting with people from different cultural backgrounds.

Similarly, Krishnan and colleagues conducted a study in the context of Speech and Audiology [15] and demonstrated the positive impact of conscious curriculum infusion. The study focused on students enrolled in a Speech, Language, and Audiology course; the intent was to assess the impact of an interculturally sound curriculum on the students. The study comprised an intervention and a control group. The students in the intervention group were debriefed about their IDI results and were also supposed to complete an online course on diversity, inclusion, and culture. They were also engaged in activities and required to write guided reflections. The students in the control group did not complete any activities, courses, or reflections but did participate in the pre-and post-IDI assessment. The study's results demonstrated that students in the intervention group significantly improved their DO scores. Therefore, creating a conscious, well thought curriculum can help students to develop intercultural sensitivity and competence.

Training the trainer is essential in intercultural learning as it helps the instructor learn the strategies to develop an equitable curriculum and foster a welcoming and inclusive classroom environment. The prior studies by DeJaeghere

and Cao [18] and Fanous and colleagues [19] have discussed the importance of training the trainer models in the context of K-12 and early childhood educators. Both studies conducted structured professional development programs to help the teachers to develop intercultural competence. A study by DeJaeghere and Cao [18] discussed a long-term professional development initiative to help teachers to develop intercultural competence. The study used the IDI assessment to assess the intercultural competence level of teachers before and after professional development. Based on the results of the pre-IDI assessment, professional development initiatives were planned. Teachers participated in various programs and activities about intercultural competence. They also took their post-IDI assessment after 2.5 to 3 years of the pre-IDI assessment. The results of the study demonstrated that teachers demonstrated a significant gain in their DO scores from pre- to post-IDI assessment. The study also confirms the impact of well-planned professional development in helping teachers to develop intercultural competence.

## Conclusion and Future Work

The disciplines such as business, management, business communication, and leadership studies emphasize the importance of intercultural competence for the students. The students in these disciplines interact with people and organizations across the globe. Therefore, knowledge of culture, values, and belief is crucial for them to interact appropriately. The initiatives such as structured study abroad programs and curriculum infusion help students appreciate and understand other cultures. Training the trainers is essential as the management classroom has a diverse population, and the majority of students are international. It is also important to measure the impact of the intercultural initiatives implemented by management

educators, prior studies have demonstrated that the IDI has been an effective tool for measuring the intercultural competence of the students and faculty engaged in the process of intercultural development. Therefore, having a culturally trained teaching workforce will help students not just to develop intercultural skills but also will help to create an inclusive classroom environment. For future work, it is essential to conduct research on the students after they graduate and learn how they use their knowledge of intercultural competence to navigate challenges that they encounter in real-world settings.



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